

11/05/13 Agenda

- Warm up
- Review 3.1 Homework
 - p. 168-170 (8-38 evens, 44-50 evens, 60)
- Review 3.1 Worksheet (last nights homework)
- Section 3.2
 - Solving Inequalities Using Addition or Subtraction
- Homework - Worksheet 3-2
 - Solving Inequalities by Adding/Subtracting

Warmup:



- Grab a slip of paper
- Put your name on it

- Distribute $-5(-2y+4x)$

$$10y - 20x$$

$$\begin{array}{r} -2y + 4x \\ -5 \boxed{\begin{array}{|c|c|} \hline 10y & -20x \\ \hline \end{array}} \\ \hline 10y - 20x \end{array}$$

Section 3.2 - Solving Inequalities Using + and -

Target 3C

Goal:

Use addition or subtraction to solve inequalities.

Review from
Yesterday:

$< \quad >$
OPEN
CIRCLE

$\leq \quad \geq$
CLOSED
CIRCLE

Always test a few points to decide which way to draw the arrow.

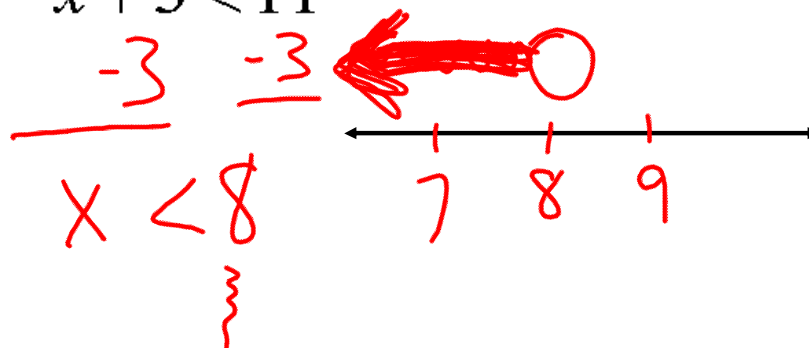
Solving
Inequalities
Using + & -:

We solve one-step inequalities the same way we solve a one-step equation, by using opposite operations. This means if there is addition, we must subtract. If there is subtraction, we must add. When we have the variable by itself, the inequality is solved and we can graph it.

Example:

Solve: $x + 3 < 11$

$$\begin{array}{r} x + 3 = 11 \\ -3 \quad -3 \\ \hline x = 8 \end{array}$$

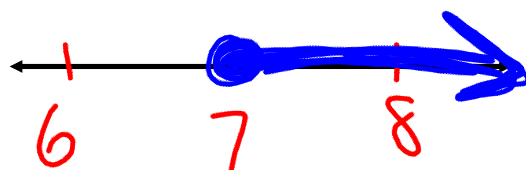


Section 3.2 - Solving Inequalities Using + and -
Target 3C

Example:

Solve: $x - 5 \geq 2$

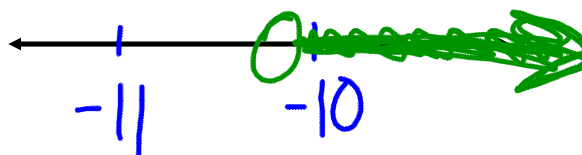
$$\begin{array}{r} +5 \quad +5 \\ \hline x \geq 7 \end{array}$$



Example:

Solve: $x + 1.2 > -9$

$$\begin{array}{r} -1.2 \quad -1.2 \\ \hline x > -10.2 \end{array}$$



Summary:

We solve one-step inequalities the same way we solve a one-step equation, by using opposite operations. Graph the inequality by testing a point to decide which way to shade. See if your potential solutions make sense in the original inequality.